OFFICE (617) 248-7000

TESTA, HURWITZ & THIBEAULT, LLP

ATTORNEYS AT LAW

HIGH STREET TOWER 125 HIGH STREET BOSTON, MASSACHUSETTS 02110

FAX (617) 248-7100

TELECOPY COVER SHEET

Equipment Operator Contact Number: 617-310-8374. Please call if you do not receive all the pages.

Date:

March 10, 2003

TO:

Name:

Examiner Prema Mertz

Company:

USPTO

Address

Washington, D.C. 20231

Telephone:

(703) 308-4229

Fax:

(703) 746-5300

FROM:

Sender:

Patrick R.H. Waller, Ph.D.

Number of Pages INCLUDING This Cover Sheet: 8

Client:

LEX-002C1 (4006/13)

Comments: U.S.S.N. 10/005,212

This facsimile is subject to attorney-client privilege and contains confidential information intended only for the person(s) named above. If you have received this facsimile in error, please notify us immediately by telephone and destroy the original transmission without making a copy.

2591232

Sent by -	Date Sent	Time Sent	
DUML DY -	TOUGHT OF THE	i mue deni	

PATENT Attorney Docket No. LEX-002C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Gillies et al.

SERIAL NO.:

10/005,212

GROUP NO.:

1646

FILING DATE:

December 4, 2001

EXAMINER:

P.M. Mertz

TITLE: .

HETERODIMERIC FUSION PROTEINS USEFUL FOR TARGETED IMMUNE THERAPY AND GENERAL IMMUNE STIMULATION

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence, and any document(s) referred to as attached hereto, is/are being transmitted to the United States Patent and Trademark Office, Facsimile No. (703) 746-5300 on this 10th day of March, 2003.

Diane Racicot

Attached hereto is/are:

1. Third Preliminary Amendment (6 pages).

2591224

Attorney Docket No. LEX-002C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Gillies et al.

SERIAL NO .:

10/005,212

GROUP NO.:

1646

FILING DATE:

December 4, 2001

EXAMINER:

P.M. Mertz

TITLE:

HETERODIMERIC FUSION PROTEINS USEFUL FOR TARGETED

IMMUNE THERAPY AND GENERAL IMMUNE STIMULATION

Commissioner for Patents Washington, D.C. 20231

THIRD PRELIMINARY AMENDMENT

Sir:

Please enter the following Preliminary Amendment for the above-identified continuation patent application.

AMENDMENTS

Prior to substantive examination, kindly amend the application as follows.

In the claims:

Please amend claims 1, 2, 3, and 23 to read as follows. (A marked up version of the amended claims is attached at the end of this Amendment and Response.)

1. A heterodimeric fusion protein comprising a first and a second chimeric chain, said first chimeric chain comprising a portion of an Ig heavy chain linked by a peptide bond to a first subunit of interleukin-12 (IL-12), said second chimeric chain comprising a portion of an Ig heavy chain linked by a peptide bond to second subunit of IL-12, said first and second chimeric chains being linked by a disulfide bond.

Third Preliminary Amendment U.S. Serial No. 10/005,212 Page 2 of 6

- 2. A fusion protein comprising a first chimeric Ig chain comprising a portion of an Ig heavy chain linked by a peptide bond to a first subunit of IL-12, said first subunit of IL-12 being linked to a second subunit of IL-12.
- 3. The fusion protein of claim 2 further comprising a second chimeric Ig chain comprising a portion of an Ig heavy chain linked by a peptide bond to a first subunit of IL-12, said first subunit of IL-12 being linked to a second subunit of IL-12, said first and second chimeric chains being linked by a disulfide bond.
 - 23. A method of increasing the circulating half-life of IL-12, comprising the steps of:
 - (a) linking a first subunit of IL-12 by a peptide bond to a polypeptide, thereby forming a first chimeric chain, said first subunit of IL-12 being linked to a second subunit of IL-12 by a disulfide bond;
 - (b) linking a first subunit of IL-12 by a peptide bond to a polypeptide, thereby forming a second chimeric chain, said first subunit of IL-12 being linked to a second subunit of IL-12 by a disulfide bond; and
 - (c) linking said first and said second chimeric chain by a disulfide bond, thereby forming a heterodimeric fusion protein,

said fusion protein having a longer circulating half-life than unlinked first and second subunits of IL-12.

REMARKS

Applicants have amended claims 1, 2, 3, and 23. Accordingly, after entry of this Preliminary Amendment, claims 1, 2, 3, 23, and 24 are pending in the Application. Applicants respectfully submit that no new matter is introduced by the amendment.

B2/